

April 26, 1991

Ms. Karla L. Johnson
Remedial Project Manager
United States Environmental Protection Agency
Region 5 (SHS-11)
230 South Dearborn Street
Chicago, Illinois 60604

RE: Agenda for the April 30, 1991 Hi-Mill Manufacturing Meeting
Project #MI135.01

Dear Ms. Johnson:

Per your request of your April 19, 1991 letter, Geraghty & Miller is submitting this letter detailing our points of concern relating to the Hi-Mill Manufacturing Phase II Hydrogeologic Investigation and our reasons for not incorporating specific United States Environmental Protection Agency (USEPA) and Michigan Department of Natural Resources (MDNR) comments pertaining to the proposed Phase II Work Plan for the investigation. The requested information is itemized below:

1. Vertical Sampling of the Intermediate Aquifer

At this point in the investigation, Geraghty and Miller does not believe that vertical sampling of the intermediate aquifer is justified nor would it be productive. The first round of groundwater samples collected from the site gave no indication that the intermediate aquifer was impacted by former plant operations. The Phase II investigation proposes additional monitoring wells to be installed in the intermediate aquifer to further examine the water quality of that aquifer. If groundwater samples collected from the existing or additional intermediate wells during the second sampling event reveal the intermediate aquifer is impacted, vertical profiling may be justified and profile intervals could be properly designed. However initiating vertical profiling of the aquifer prior to identifying any impacts in the aquifer seems un-warranted. Vertical profiling is also an expensive technique. Cost estimates of \$25,000 to \$50,000 per profile have been developed. These costs would be in excess of those costs already developed for the Phase II investigation.

2. Gamma Logging of Monitoring Wells

The Geraghty & Miller Phase II Hydrogeologic Investigation Work Plan indicated that a CME, 5 foot, stainless steel, split spoon continuous sampler would be utilized during drilling activities. The continuous cores obtained from the CME sampler will provide a physical record of the soil profile at the site. Geraghty & Miller will also photograph each sample core to provide a visual record of the stratigraphic profile of the site. Geraghty & Miller fails to see the additional benefit of gamma logging the monitoring wells and views it as an unnecessary redundancy in the investigation. The cost of gamma logging the monitoring wells would be under \$ 1,000 per well.

3. Sampling MDNR Wells

Geraghty & Miller has not seen any construction logs for the MDNR wells or any other documentation regarding the quality assurance procedures associated with their installation. A visual inspection of these wells showed evidence of physical degradation or the absence of competent seals around the wells. Without the construction specifications and the present physical conditions, the integrity of the groundwater samples collected from these wells are suspect.

Geraghty & Miller believes that the additional analytical information obtained from sampling the MDNR wells would not justify the incremental costs of sampling. The present locations of existing shallow monitoring (SW) wells is adequate to monitor the former lagoon area. All the shallow monitoring wells are proposed to be sampled during the Phase II activities. Due to their present locations and undocumented construction, groundwater samples collected from the MDNR wells would provide redundant and possibly suspect data. The estimated cost of additional sampling and testing for all six of the MDNR wells would total approximately \$ 6,000.

4. Additional Piezometer Installations

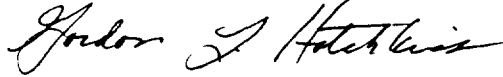
Geraghty & Miller was informed that the request for piezometer installation north west of M-59 was required to fully characterize the shallow groundwater flow path at the site. Geraghty & Miller believes that the piezometer locations proposed in the Phase II Work Plan are sufficient to delineate the shallow flow paths proximal to the site. The drainage construction specifications of M-59 between the site and the north side of M-59 are also presently unknown. The static groundwater elevations collected in the requested piezometers located north of M-59 may therefore not reflect the same shallow flow conditions as those delineated for the area surrounding the Hi-Mill facility.

These four issues are the only ones where we do not agree with the requests of the USEPA and MDNR. However there are other issues which we would like to discuss for purposes of clarification. These issues include the use of a photo-ionization meter for pre-screening soil samples and the location of hand auger borings.

We propose that the agenda for the April 30, 1991 meeting follow the organization of this letter and that each topic be discussed sequentially as presented in the discussion above. Please call us if you have any questions regarding this letter.

Sincerely,

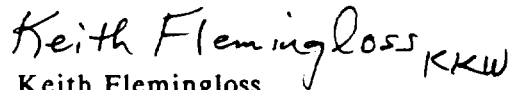
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